

## CLAIMS

- Sub  
A(1)
1. An apparatus comprising:
    - 2 at least one processor;
    - 3 a memory coupled to the at least one processor;
    - 4 class configuration data comprising a plurality of entries residing in the memory, each
    - 5 class configuration entry including a key-value pair, wherein the key includes information
    - 6 relating to a selected processing context and the value includes configuration data for a class
    - 7 in the selected processing context; and
    - 8 an object oriented class replacement mechanism residing in the memory and executed
    - 9 by the at least one processor that generates an instance of a selected class by using a key that
    - 10 includes context information to access the appropriate entry in the class configuration data.
  - 1 2. The apparatus of claim 1 wherein the key comprises context information appended to  
2 a class identifier.
  - 1 3. The apparatus of claim 2 wherein the class identifier comprises a class token that  
2 comprises a text string.
  - 1 4. The apparatus of claim 1 further comprising a factory object that generates an instance  
2 of the selected class by accessing the appropriate entry in the class configuration data  
3 using the key.
  - 1 5. The apparatus of claim 1 further comprising a key generator mechanism that generates  
2 the key from a class identifier and from the context information.



- 1 12. A method for replacing an existing class with a replacement class in a distributed  
2 object environment, the method comprising the steps of:
- 3 (1) storing configuration data for the existing class using a corresponding key that  
4 includes information relating to a selected processing context;
- 5 (2) replacing the configuration data for the existing class with configuration data  
6 for the replacement class while maintaining the same corresponding key;
- 7 (3) initiating the creation of an instance of the replacement class;
- 8 (4) generating a key that includes information relating to the current processing  
9 context;
- 10 (5) retrieving the configuration data for the replacement class using the generated  
11 key; and
- 12 (6) creating an instance of the replacement class according to the retrieved  
13 configuration data for the replacement class.

